Amendments to the Specification

Page 1, paragraph 2, line 3:

XML is rapidly becoming the vehicle of choice as a definition language for the description of content-related structures. XML provides great flexibility and universality because XML [[it]] provides a grammar that can express nearly any content. On the Internet in particular, the standardized representation of content structures generates unexpected opportunities.

Page 1, paragraph 3, line 2:

More and more, mission-critical applications are designed to run on the Internet. ~~Adding~~ Add the logical structuring capability of XML to the mix, and a new infrastructure that is ideal for running electronic business applications on the Internet becomes much more feasible. Databases can now be accessed directly via XML without having to use CGI and HTML or Java in addition.

Page 2, paragraph 1, line 1:

Relational databases provide a primary tool for ~~business~~ businesses to maintain, access, and analyze data. Such database technologies have evolved over many years so that they are optimized for accessing and manipulating large information bases. Many businesses store the majority of their critical information in 5 relational databases. Moreover, many Internet sites managed their data using relational database technology. This approach also makes it possible to develop database search engines for sifting through the large volumes of information that "live" on the Internet.

Page 2, paragraph 2, lines 2 and 3

The combination of database technology with a self-describing structure of hierarchical languages such as XML opens an interesting perspective for [[the]] new applications.

Page 2, paragraph 3, line 1:

~~Though~~ ~~the~~ The implementation of the kind of tree structures supported by hierarchical languages such as XML in the form of a relational data model presents a number of issues, some of which have already been addressed and 15 solved. One vexing issue is presented when transmitting large amounts of data over the Internet in the form of hierarchical data

such as XML. A mechanism that permits large databases to exchange data in the form of hierarchical data structures is desirable.

Pages 2-3, paragraph 4, line 3:

The invention provides a mechanism for users and programmers to load semi-structured hierarchical data, such as XML data, of arbitrary size and structure into relational database tables using ~~an~~ a schema such as an SQL-annotated XML schema. The schema describes how XML data maps into base tables and fields, including complex one-to-many and many-to-many relationships.

Pages 7-8, paragraph 4, lines 5 and 7

Client and server communicate with one another utilizing the functionality provided by a protocol layer. For example, Hypertext-Transfer Protocol (HTTP) is a common protocol that is used in conjunction with the World Wide Web (WWW) or, simply, the "Web." Typically, a computer network address such as a, ~~Universal~~ Uniform Resource Locator (URL) or an Internet Protocol (IP) address is used to identify the server or client computers to each other. The network address can be referred to as ~~Universal~~ Uniform Resource Locator address. For example, communication can be provided over a communications medium. In particular, the client and server may be coupled to one another via TCP/IP connections for high-capacity communication.

Page 20, paragraph 2, line 4:

Create temporary tables (552). These tables will be used to hold the original information before it is transferred to the actual tables. In this way, all work can be done on the server which should be much better ~~performancewise~~ performance-wise [[that]] than trying to generate and propagate ID's on the fly and sending data between the database server and the middle tier.